

This species is an extremely elongate, solid form of the *crassilabris* section of *Glessula*—and one of the most distinct.

GLESSULA BUTLERI, n. sp., Plate I, Fig. 7.

Shell elongately turreted, very thin and brittle, tumid, pale corneous, glassy, very minutely striated, apex very blunt; whorls 8, rather rounded, suture deep, body whorl much swollen and capacious; aperture vertical, pear-shaped, lip rather thin.

Alt. 1·13, major diam. 0·45 in.

Hab.—Eastern Burraill Range at 6000 feet—not a common form.

I name this shell after Captain J. Butler, Political Agent in the Nágá Hills, with whom I had the pleasure of being associated when mapping that very interesting and beautiful district.

EXPLANATION OF PLATE I.

- Fig. 1. *Helix delibrata*, var. *fasciata*.
 „ 2. *H. (Nanina) atricolor*.
 „ 3. „ „ *Shisha*.
 „ 4. *Glessula orthoceras*.
 „ 5. „ *illustris*.
 „ 6. „ *Burraillensis*.
 „ 7. „ *Butleri*.

II.—*Descriptions of four New Species of Mollusca belonging to the family Zonitidæ from the N. E. Frontier of Bengal, with drawings of Helicarion gigas, Benson and of a variety of the same.*—By Major H. H. GODWIN-AUSTEN, F. R. G. S., F. Z. S., &c., Deputy Superintendent of the Topographical Survey of India.

(Received Sept. 1874,—Read January 6th, 1875.)

(With Plates II—III.)

HELICARION SHILLONGENSE, n. sp.

Animal ochre colour, the mantle being slightly paler than the rest of the body, there is no longitudinal streaking on the side of the foot, which, viewed under a lens, is covered with minute protuberances evenly distributed; foot beneath dull ochre brown.

Shell horny, thin, long and narrow, pale green in colour. (Plate II, Fig. 1a).

Length 0·9", diam. 0·28."

The dimensions of these creatures are not so easily taken, the different parts expanding and contracting alternately.

Extremity of foot to posterior end of the mantle,...	1·9	inch.
Mantle,.....	1·5	
Anterior end of mantle to head,.....	0·9	

Total, 4·3

Eye tentacles, 0·42

HELICARION SHILLONGENSE, var., Plate II, Fig. 1.

Animal dark umber brown, body concolorous, the mantle a shade lighter, nearly covering the shell in both varieties, the foot beneath is ash-coloured; when taken fresh there is a slight indentation at the anterior edge of the mantle (*vide* fig.). Shell as in fig. 1 a.

Extremity of foot to posterior edge of mantle, ...	1·70	inch.
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Mantle,	1·70
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Anterior end of mantle to head,	0·95
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Total, 4·35

Eye tentacles, 0·45

Hab.—Shillong and North Khasi Hills. Both these forms are near *H. Theobaldi*, but may be distinguished at once by the absence of the white stripe on the edge of the left lobe of the mantle, and by the longer form of the shell. The tentacles are longer than in *H. brunneum*.

HELICARION BRUNNEUM, n. sp., Plate II, Fig. 2.

Animal a rich brown, mottled on the mantle with dark sepia, distinctly marked with parallel streaks, that extend from a zigzag line running along the side of foot, the margin of which is edged below with a series of short parallel markings; foot beneath dark ochre. Large portion of shell exposed, which is of same form as that of *H. Shillongense*.

Dimensions when fully extended:

Extremity of foot to posterior end of mantle,.....	1·5	inch.
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Mantle,	1·6
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Anterior end of mantle to head,	0·47
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Total, 3·57

Eye tentacles, 0·32

Breadth of body, 0·56

Hab.—Shillong, Khasi Hills, in grassy localities.

HELICARION NAGAENSE, n. sp., Plate II, Fig. 3.

Animal ochre colour, prettily mottled and dotted with a darker shade of the same, the mantle covers nearly the whole shell; a narrow white line, commencing near the posterior margin of the slit disclosing the shell, extends round towards the respiratory orifice on the right hand side, and in

front another line curves round to the left anterior side (fig. 3*b*). Mucous gland as in *H. gigas*. Length about 3 inches.

Shell ovate, exceedingly thin and brittle (fig. 3).

Major diam. 0·90, minor 0·55 in.

PARMARION? RUBRUM, n. sp., Plate II, Fig. 4.

Animal of a fine orange pink, grey on under side of the foot; tentacles short, mantle entirely covering the shell, with only a slight trace of a longitudinal opening running back from the anterior left side, three parallel bands of greenish grey along the back of the neck, the eye-tentacles being of the same colour. The gland at extremity of foot with a long, overhanging lobe,

Extremity of foot to posterior end of mantle,	0·9 inch.
Mantle,	0·8
Anterior side mantle to head,	0·4
Total length when moving,	1·8

Shell quite rudimentary, minute, granular (fig. 4*b*).

Major diam. 0·14 in.

Hab.—Kohima, Nágá Hills, in brushwood.

The mucous gland in this species differs considerably from that of *Helicarion gigas* and its allies, the upper lobe projecting and hanging over so as to present, when viewed sideways, a narrow horizontal slit.

HELICARION SOLIDUM, Godwin-Austen, Plate II, Fig. 5.

When this species was first brought to notice by me in the P. Z. S., 1872, Plate XXX, the animal had never been observed. It has the form of *Shillongense*, &c., and a specimen from Kohima was dark umber, pinker below, with no mottling on the body; tentacles dark.

In another specimen from the Dunsíri valley, Assam, the animal was pinkish grey with dark mottling, the mantle covered the whole shell and had a slight indentation on the extreme anterior margin; the mucous gland with small lobe above, the extremity of foot cut off rather square.

Total length 2·70, mantle 1·3, mantle to head 0·5 in.

Shell—major diam. 0·44 in. (fig. 5).

The specimen from this locality may be young, but the shell is so similar in form to *H. solidum*, first observed on the peak of Hengdan, Muni-pur frontier, that I have not separated it.

HELICARION GIGAS, Benson, small var.

I found that typical *gigas*, originally described from Teria Ghat at base of the Khasi Hills, was replaced on the Burreil Range, by the form a drawing of which, together with one of *H. gigas*, I give on Plate III.

Desc.—Animal dark ochre brown with very dark mottlings, particularly distinct upon the margin of the foot.

Shell—major diam. 0·85, minor 0·56 in.

Helicarion gigas was described by Benson as *Vitrina* in J. A. S. B., Vol. V, p. 350.

EXPLANATION OF PLATES.

PLATE II.

Fig. 1. *Helicarion Shillongense*, var. 1a. Shell of ditto.

2. „ „ *brunneum*.

3. „ „ *Nagaense*. 3a. Animal: mantle, side view. 3b. Mantle from above. 3c. Mucous gland.

4, 4a. *Parmarion ? rubrum*. 4b. Shell of ditto. 4c. Extremity of foot. 4d. Head withdrawn below mantle. 4e. Mantle from above.

5. *Helicarion solidum*, G-A., shell. 5a. Mantle from above. 5b. Mantle, side view. 5c. Mucous gland. 5d. Extremity of foot.

PLATE III.

1. *Helicarion gigas*, Bs., nat. size.

2. „ „ small var. „



III.—*Descriptions of New Operculated Landshells belonging to the genera Craspedotropis, Alycaeus, and Diplommantina, from the Nágá Hills and Assam.*—By Major H. H. GODWIN-AUSTEN, F. R. G. S., F. Z. S., &c.

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(With Plate IV).

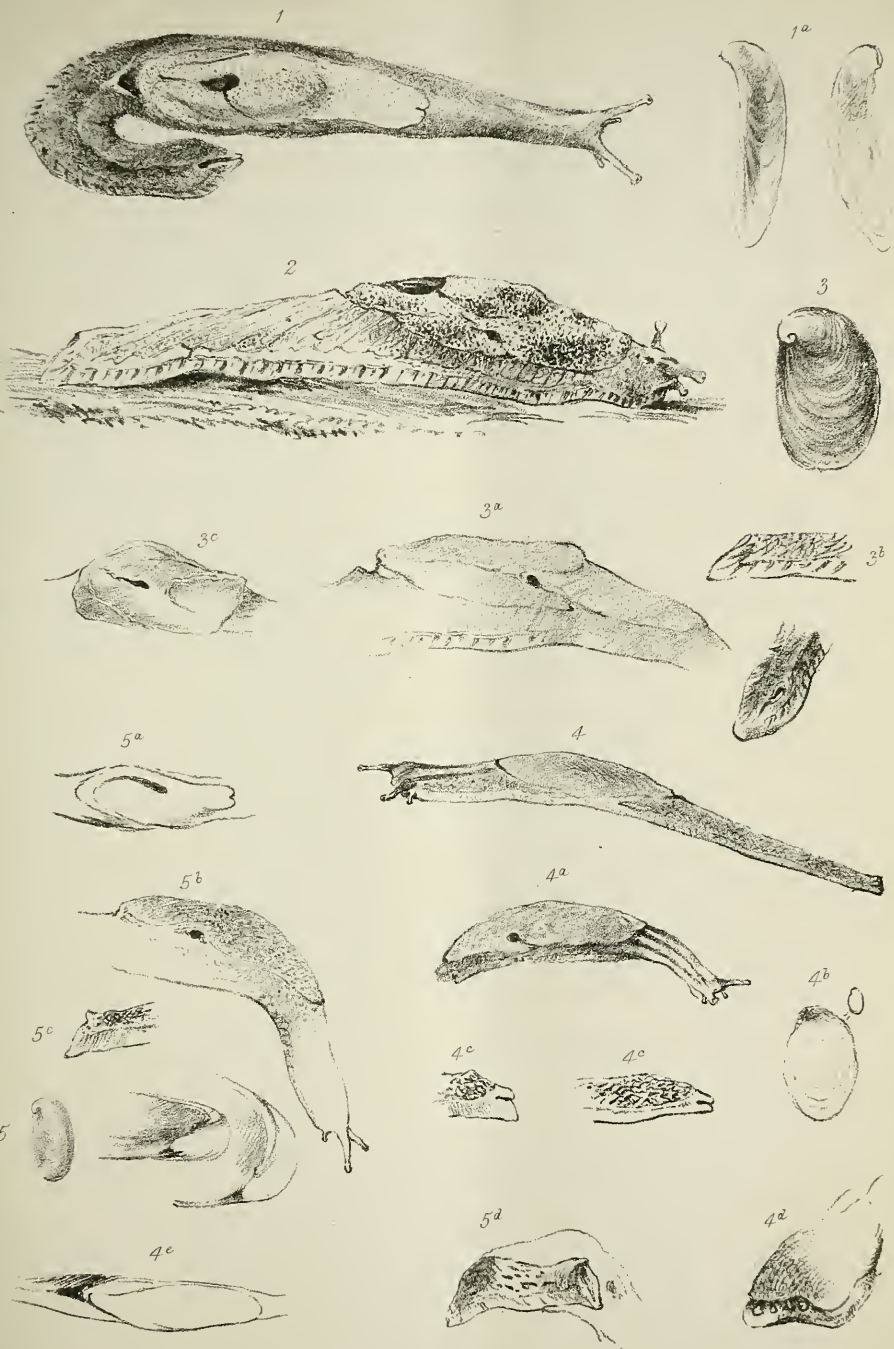
CRASPEDOTROPIS FIMBRIATUS, n. sp., Plate IV, Fig. 1.

Shell conoidly turbinate, closely umbilicated, thin, covered with a rough dark brown epidermis, longitudinally striate, a leaf-like fringe adorns the periphery of the last whorl, spire conoid, its side concave, apex attenuate, blunt, suture deep; whorls 5, flat above, aperture diagonal, circular, the lip slightly reflected, peristome thin. Operculum multispiral, flat, smooth on outer surface. Animal not seen.

Major diam. 0·19, alt. 0·15 in.

Hab.—Hengdan Peak, Naga Hills, at 7,000 ft., in forest.

Only one specimen was obtained. This is a very interesting shell, as being the first of the genus from this part of India; *Craspedotropis*, esta-



Godwin-Austen, del.

SPECIES
 OF
 HELICIDÆ, &c.
 N. E. FRONTIER, BENGAL.

Maclure & Macdonald, Lith.

